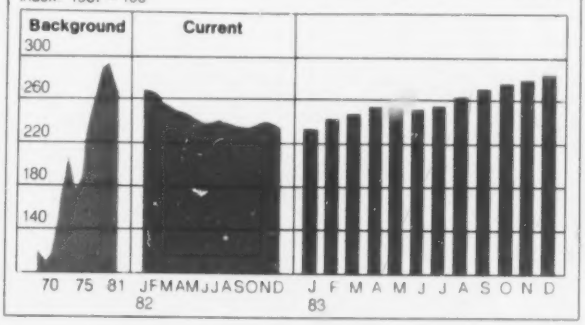
BUSINESS DATATRAK

Raw material price barometer

Latest month	282.4
Month before	279.8
Year ago	227.4

Index: 1967 = 100



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	347.00	347.00	347.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	24.40	24.40	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	17.50	17.50	17.50
Steel, bars, Pitts., cwt.	17.5	17.5	14.35
Steel, bars, C.R., Pitts., cwt.	26.00	26.00	31.00
Steel, plates, Pitts., cwt.	23.25	23.25	24.25
Steel, plates, H.R., Pitts., cwt.	23.25	23.25	24.25
Steel, sheets, C.R., Detroit, cwt.	27.10	26.15	24.65
Steel, strip, C.R., Chi., cwt.	35.30	35.30	29.05
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.760	0.750	0.470
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb.	4.95	4.95	4.95
Brass, red, 85%, [sheet], lb.	1.22	1.22	1.24
Brass, yellow, [sheet], lb.	1.17	1.17	1.18
Cadmium, ton lots, lb.	1.25	1.25	1.00
Copper, electrolytic, wire bars, refd., lb.	0.68	0.68	0.77
Copper sheet, over 24 in., lb.	1.31	1.31	1.33
Lead, common, N.Y., lb.	250	250	205
Magnesium, pig ingot, [99.8%], lb.	1.43	1.38	1.34
Mercury, 20 fl. lots, N.Y., fl.	315.00	323.00	380.00
Molybdenum Climax Oxide/bags, lb.	4.65	4.65	4.40
Nickel, electrolytic, producer, lb.	3.20	3.20	3.20
Platinum, producer, oz.	475.00	475.00	475.00
Silver, N.Y., oz.	8.20	9.35	12.00
Tin, Straights, N.Y., lb.	6.25	6.30	6.21
Zinc, Prime West, East St. Louis, lb.	0.49	0.49	0.38
Zinc, die casting alloy, No. 3, lb.	0.555	0.555	0.465
PAPER			
Uncoated book, 13 offset, ton	760.00	760.00	800.00
Watermarked bond, ton	915.00	915.00	845.00
Gummed sealing tape, carton	15.45	15.41	15.50
Boxboard, mach. clay ctd. recycled sheets, 80 bright, .016, ton	475.00	475.00	475.00
Wrapping paper, std. distribution cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	290.00	290.00	250.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	0.315	0.317	0.229
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.02	1.02	0.95
Cotton middling, 1", N.Y., lb.	0.694	0.716	0.616
Printcloth, 48", 80x80, N.Y., spot, yd.	0.840	0.840	0.610
Army duck, 37", 13 oz., yd.	1.79	1.69	1.00
Blended printcloth, 64", 78x54, yd.	0.71	0.71	0.65
20s combed yarns	2.14	2.10	1.70
Wool tops, N.Y., lb.	3.60	3.60	3.60

	Latest price	Previous month	Year ago
CHEMICALS			
Acrylonitrile, tanks, lb.	0.43	0.43	0.43
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	195.00	195.00	210.00
Benzene, petroleum, tanks, Houston, gal.	1.41	1.45	1.42
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	0.58	0.58	0.66
Formaldehyde, USP, 37%, [12% to 15% meth], tanks, lb.	0.106	0.106	0.101
Glycerine, synthetic, tanks, lb.	0.810	0.730	0.725
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.450	0.450	0.715
Naphthalene, crude, tanks, lb.	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.305	0.305	0.310
Polyethylene resin, low density liner film grade (market price), lb.	.420	.420	.290
Polypropylene, homopolymer grade (market price), lb.	0.42	0.42	0.35
Polystyrene, general purpose grade (market price) lb.	0.40	0.40	0.38
Shellac, bone dry, N.Y., lb.	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.350	0.350	0.350
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	132.50	132.50	135.00
Sulphuric acid, 66%, commercial, tanks, ton	56.35	56.35	56.35
Titanium dioxide, anatase, rec. carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.	1.35	1.35	1.45
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl.	311.65	318.25	300.60
Lumber 2x2, pine, mbf, cl.	310.60	313.50	288.80
Plywood, plyform, 3/4", msf, cl.	551.20	546.35	557.35
Plywood, 5/8", msf, cl.	350.75	355.25	340.25
Cement, bulk, ton, tl.	61.78	61.88	62.02
Sand, ton, cl.	6.12	5.99	5.89
Ready-mix concrete, 3,000 psi/cu. yd., 15 cu. yd.	45.75	45.64	46.17
Crushed stone, 1½", ton, cl.	7.83	8.00	7.81
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl.	0.76	0.76	0.75
Gypsum sheathing, ½"x1"x8", msf, tl.	192.50	181.57	159.04
Brick, common, per thousand, tl.	171.83	171.33	173.00
Asphalt paving, AC-20	159.64	158.71	156.77
Concrete sewer pipe, 12", prem. joint, per foot, cl.	6.79	6.80	6.63
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl.	25.75	24.40	22.75
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	31.50	30.75	30.50
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.810	0.820	0.810
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.765	0.770	0.857
Heating oil, No. 2, Chi., bulk, gal.	0.835	0.725	0.863
Heating oil, No. 2, N.Y., bulk, gal.	0.878	0.818	0.858
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.25	26.25	25.05
Jet kerosene, gal.	0.860	0.780	0.860
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.460	0.460	0.475
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	98.00	90.00	62.00
Steel, No. 1, hvy., dlvd., Chi., ton	88.00	83.00	54.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	0.585	0.605	0.595
Copper, No. 2, East, wholesale buy, dlvd., lb.	0.495	0.510	0.530
Brass, red, East, wholesale buy, dlvd., lb.	0.545	0.565	0.555
Brass, yellow, East, wholesale buy, dlvd., lb.	0.315	0.320	0.315
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	0.500	0.450	0.230
Alum., mixed clip, E., wholesale buy, dlvd., lb.	0.515	0.475	0.240
Zinc, old, East, wholesale buy, dlvd., lb.	0.185	0.190	0.075
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.150	0.150	0.100
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	25.00	25.00	5.00
Paper, old corrug. box, dlr., N.Y., ton	21.00	21.00	4.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.110	0.105	0.100
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.33	0.33	n.a.

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

Demand to support higher paper prices

The paper industry, coming off a late-1983 recovery, can look forward to another bullish 12-24 months. At least that's what Wharton Econometric's new projections are suggesting.

Using their complex mathematical model, analysts at the Philadelphia-based consulting firm see paper production up 7.6% this year and another 4% or so in 1985 when the economy is expected to begin cooling off a bit.

These kinds of demand increases, which virtually guarantee close-to-capacity operating rates, also seem to suggest a continuation of recent price hikes. Wharton computer printouts, for example, point to an average 7.4% increase in industry prices over the next 12 months—and only a fractionally higher 8.1% advance for the subsequent year (1985).

The latter projection, however, could be somewhat misleading. Price hikes are expected to peak in early 1985—with somewhat smaller advances in store for late 1985 and early 1986.

Demand and price trends will also be uneven—depending on the particular sector of the industry (see charts). Developments in some of the key areas are expected to shape up along these lines:

■ **Containers:** This especially cyclical sector is very much linked to movement in overall industrial production. In any case, because of a lag in responding to the 1983 business pickup, demand should grow in excess of 7% this year—but slow down to near 4% in 1985.

As for container prices, look for about a 6.4% advance over the current year—reflecting vastly improved demand and near-full-capacity operations for unbleached paper and paperboard. Moreover, since little new production potential will be coming on stream, price hikes for 1985 will continue at or even slightly above 1984 levels.

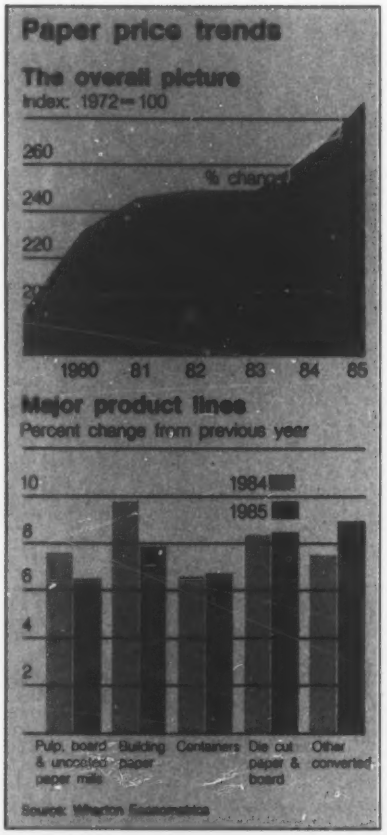
■ **Building papers:** In contrast to the container sector, this area recovered very early in the current recovery, showing positive growth even in 1982. Supported by the housing boom, production swelled in 1983, while a price increase close to 5%during that year represented the only significant price advance for any sector within the overall paper industry.

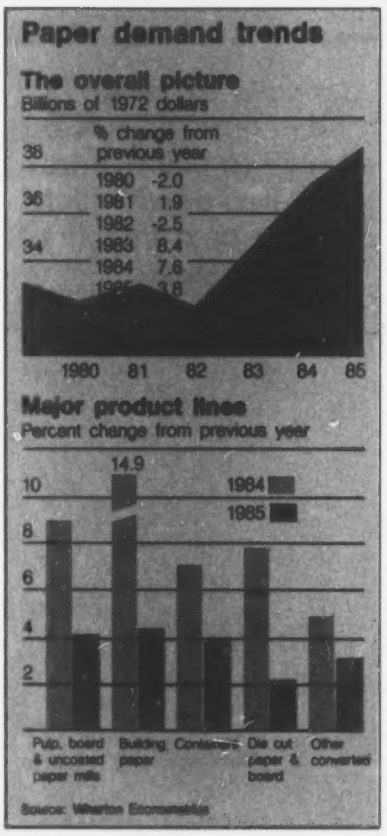
Prices, which gained close to 5% in 1983, could well chalk up an advance of over 9% for 1984 as a whole. But as demand pressures ease a bit in 1985, prices are expected to grow more slowly—remaining in the 7% range throughout the year.

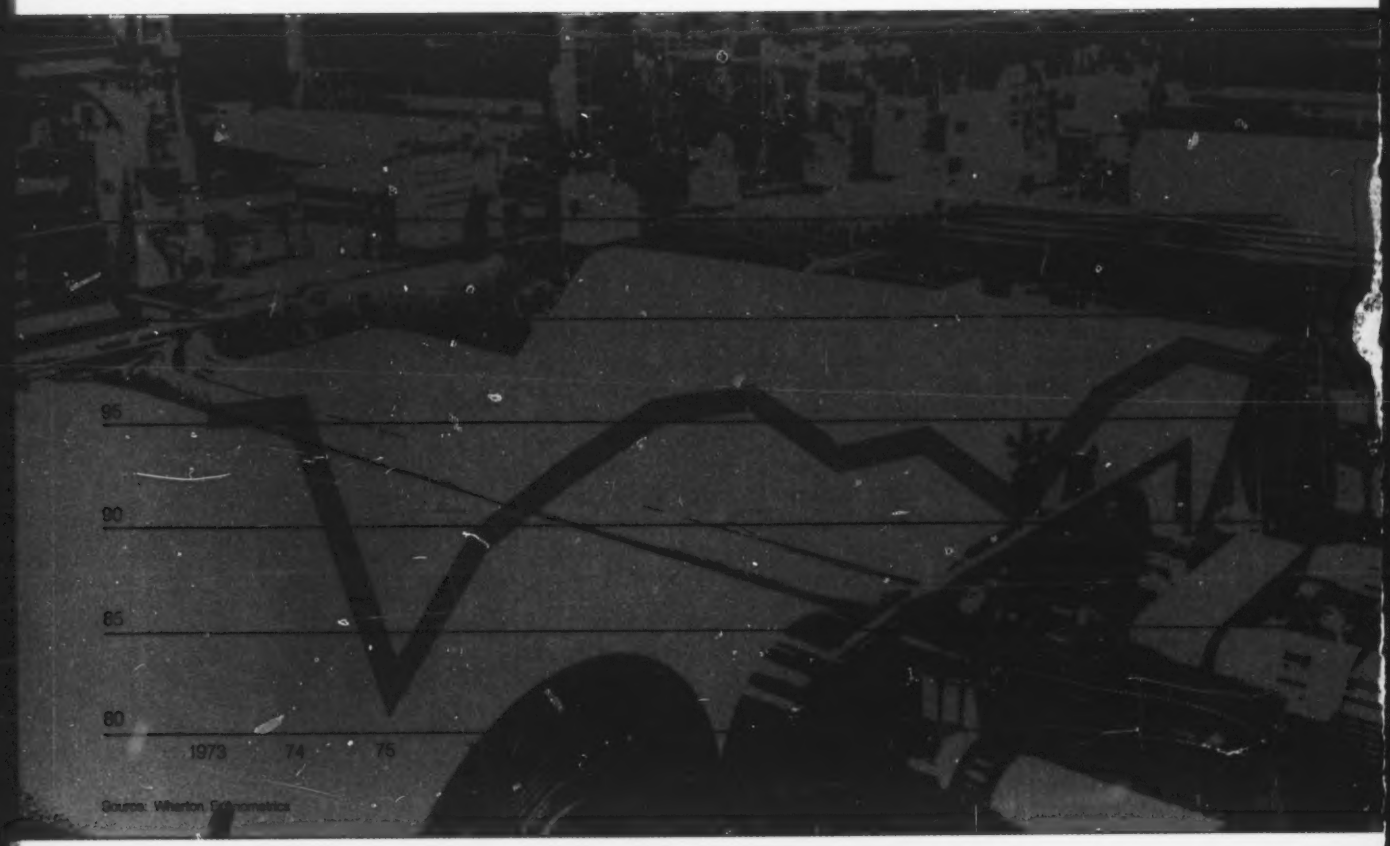
The 1985 demand slowdown will for the most part reflect some easing off in housing. But with nonresidential activity remaining strong, overall use of building paper should still manage to rack up a fair-sized 4.3% gain—though nothing like the big 14.9% increase targeted for the current year.

■ **Pulp, unbleached paper, and paperboard:** Prices have until recently been quite depressed, showing only small signs of improvement even at the end of 1983. This is due primarily to two factors: (1) the oversupply of newsprint (excess capacity here is a problem in both the U.S. and Canada—and although utilization will improve in 1984, some excess will remain) and (2) the poor demand for market pulp. On the latter score, international buying has been too weak to support any significant increase in pulp prices, which are determined internationally.

However, as the economies of our trading partners recover in 1984, demand for pulp will pick up enough to support higher pulp quotes. The Wharton forecast calls for prices in this overall category (pulp, unbleached paper, and paperboard) to jump 7.6% in 1984—more than recouping the 1.6% decline of last year. Price boosts will continue at a more







Capacity expansion in fine papers will not be enough to push operating rates down much over the next couple of years.

moderate pace in 1985—averaging near 6.6%.

As for overall demand in this sector of the paper industry—look for a gain of 8.9% this year and 4.2% in 1985 as a result of improved demand both here and abroad.

■ **Other converted products:** Demand in this sector (which includes coated papers, shipping sacks, bags, stationery, and sanitary paper products) is expected to be steady through 1985. After a big spurt in 1983, production will average about 3% a quarter (on a seasonally adjusted annual-rate basis).

Most individual products should share in this growth. Expansion in overall industrial production, for example, will fuel demand for bags and sacks. Sanitary papers will be affected by strong consumer expenditures. And most notably, fine paper buying will remain exceptionally strong as use by publishers, printers, and offices accelerates.

Specifically, strong consumption activity is fueling advertising, while renewed business strength has increased the use of office papers. Faced with large order backlogs and very high operating rates, almost all U.S. producers of fine papers announced September 1983 price increases averaging near 7%. Imports, which have not been important to this sector, have also been rising. And last, but not least, nothing indicates that inventories have been absorbing a large share of this big demand spurt.

Fine paper prices are expected to rise further in 1984—as demand remains strong and capacity utilization creeps still higher. True, capacity expansion in fine papers should be greater than for other grades over the next couple of years. But it will not be sufficient to push operating rates down that much in the next year or two.

Upshot: The strong price increases expected in fine paper will tend to influence overall averages in the "other converted product" sector—as operating rates near 100% are maintained through 1985. This should help push prices in this segment of the paper industry up 7.7% this year and 8.9% in 1985. ***PW***

Dip in freight rates has ended

Freight tabs aren't going to be quite the bargain they were last year. But by the same token, neighter are they about to take off. So say the overwhelming majority of purchasing and transportation executives responding to a nationwide *PW* freight cost survey.

The general feeling is that while good deals can still be negotiated, things won't be quite the same as last year when the combination of recession and deregulation actually reduced overall transportation bills for many shippers.

As one PM succinctly puts it, "We would be unrealistic to expect a repeat of last year's transportation cost savings. Nevertheless, we're confident we can hold the overall rate increase to around 5%—perhaps a bit under the general inflation rate."

Some of the more specific findings of the just-completed survey:

■ **Actual 1983 rate changes:** Nearly seven out of every 10 queried say they managed to hold 1983 tags at or under year-earlier levels. And less than one in 10 say the increases ran over 3%. A good many of the declines showed up in the truck sector, where rates in some instances fell by more than 20%

■ **Expected 1984 rate changes:** Only three out of 10 expect either no change or declines—far fewer than last year. And whereas less than one out of 10 saw increases in excess of 3% last year, this time around the comparable reading is six out of 10. Increases are also expected to begin appearing in the heretofore stable small-shipment area—with average 1984 hikes put in the 4-6% range.

But there's some good news for freight buyers, too. Specifically, while the number anticipating acceleration outnumbers those anticipating deceleration by a 9:1 margin, not a single respondent expects a return to the double-digit advances of a few years back.

This slow, rather than fast, acceleration is also confirmed by econometric projections. The Wharton model (regularly monitored by *PW*) suggests about a 7% increase in overall freight tabs this year, with the 1985 advance put at only a slightly higher 8%.

But whatever the increase, buyers mean to keep the pressure on—in many cases by contractural agreements. Almost all those taking this tack say the potential savings come to at least 10%—with a few putting the cost advantage as high as 25-30%.

And it covers most transportation modes, too. One large, durable-goods producer who has been taking this approach on both rail and barge, for example, estimates a 20-25% saving, which translates into nearly $5 billion in money that might otherwise have been spent.

A few also tell of continuing intermodal shifts. These generally involve switches from rail to truck—with savings estimated in the 10-25% range. One PM, however, tells of how his shift from truck to UPS save his firm 5-10%.

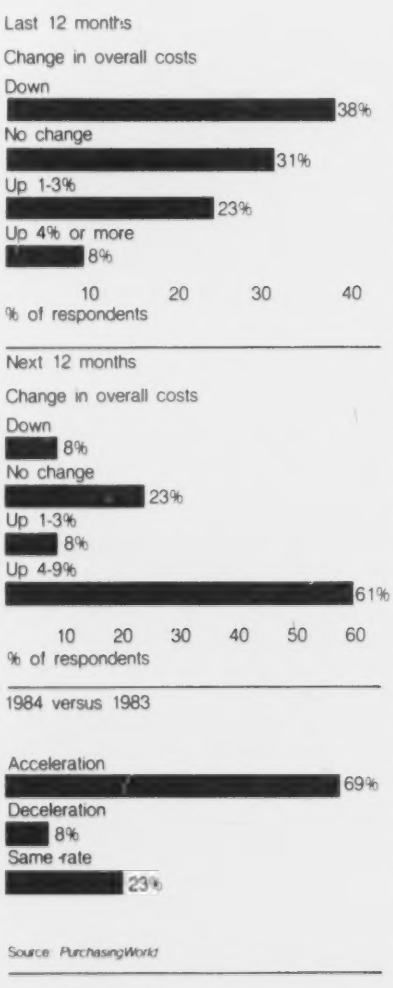
The jury, however, still seems to be out on the use of more company-owned fleets. The number noting savings by taking this approach just about balanced out those who feel "for hire" truckers and contracts with common carriers can offer better overall deals.

Still another ploy noted as being useful in holding down overall bills: reducing the number of carriers by offering truckers bigger volumes. And another shipper tells of going to flat-rate pricing based on mileage for LTL and calling for multi-delivery for truckloads.

Technology is also helping—especially the shift to new, bigger vehicles and the increased use of tandem trailers that allow dropoffs at two different sites.

As one Midwest shipper sums it up: "The name of the game today is negotiation as carriers become increasingly willing to price their services on the basis of the real costs involved. If you offer them an opportunity to cut their costs, the chances are you can probably get them to drop their rates." *PW*

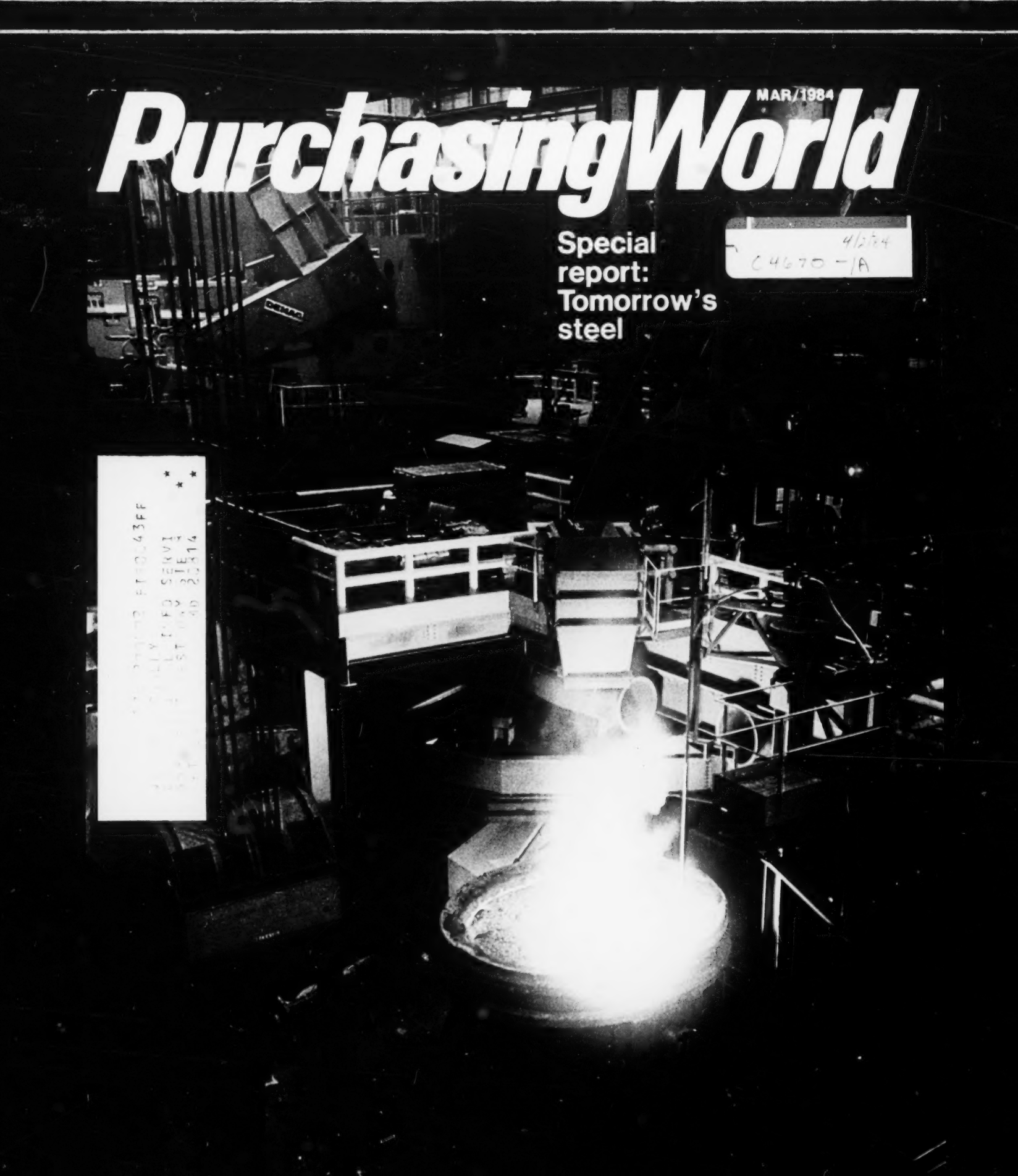
Buyers' view of freight costs



PurchasingWorld

MAR/1984

Special report: Tomorrow's steel



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PW PREDICTS

Robert S. Reichard, executive editor

Upward price pressures building

Count on paying a bit more for your average industrial purchase mix over the next few quarters.

That's not to say that a major inflationary spiral is just around the corner—it's not. On the other hand, it's hard to ignore the increasing number of price boosts that have been posted over the past month or so. Most buyers today, for example, would agree that the more-than-year-long lull in price advances is finally coming to an end. And there's plenty of evidence to back up this conclusion.

First, there's the supply-demand factor. Rising consumption (coupled with only very modest capacity additions) are pushing up operating rates—with the typical American plant now working at close to 80% of its production potential. And even this may be on the low side. A fair amount of today's unused capacity is either economically or technologically obsolete and, hence, may never be reactivated.

Then, too, some industries (like electronics and paper) are already operating at pretty much full capacity. In any event, it is not inconceivable that a substantial number of industrial sectors will be operating at so-called "preferred" levels before the current year is out.

The possibility of increased labor costs also has to be factored into the price equation. If nothing else, the near-balance of wage boosts and productivity offsets seems to be ending. Efficiency gains are harder to come by as less efficient equipment is gradually brought back on stream and as we come closer to preferred levels of operations.

More important, labor demands are slowly beginning to accelerate. This is a big bargaining year, and as orders roll in and profits soar, organized labor is becoming more insistent on "getbacks" to make up for last year's recession-induced "givebacks." Quarterly unit labor cost increases have been accelerating over the past two quarters, and all indications suggest the same pattern for the first six months of the current year.

Then there's the dollar-exchange-rate factor. The greenback is not going to get any stronger. Indeed, if recent projections are correct, it may well begin to ease off in the months immediately ahead. Other things being equal, this will mean fewer really big import bargains. As a result, it will be a bit easier for domestic vendors to boost their own quotes.

Adding weight to these pressures is a new leading index of inflation (prepared by the Center for International Business Cycle Research at Columbia University). Comprised of three series (sensitive industrial material tags, financial market pressures, and the percent of workers employed), this index is now signalling some moderate price acceleration.

But, the accent should be on the word *moderate*. Under no stretch of the imagination can a case be made for another round of runaway inflation. What the evidence does suggest, however, is that some of the low inflation forecasts currently making the rounds may be a bit on the optimistic side.

Thus, the 4.5-5% increase in the GNP deflator envisioned by government economists for the 12-month period ending next December could be something of an underestimate. ***PW***'s own calculations now suggest a figure in the 5-5.5% range—with the fourth-quarter 1984 advance probably closer to a 6% annual rate.

Energy

It looks like pretty smooth sailing as far as energy cost pressures are concerned—at least from now through the end of the year. Indeed, the only sector facing continued double-digit increases is natural gas. And even this may be an exaggeration given the current glut in this clean-burning fuel.

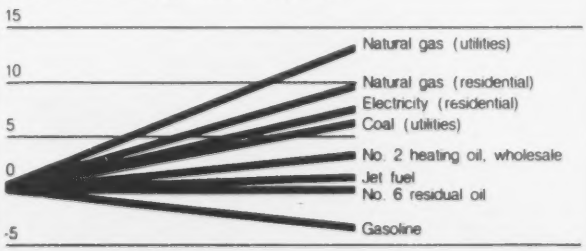
The new estimates (based on the latest Department of Energy quarterly forecast) are detailed in the accompanying chart. In general, they suggest little or no change in most petroleum-based products—and a liveable 6-7% increase in electricity rates (determined by combination of oil, gas, coal, and capital costs).

All this will be occuring in the face of an increase in energy consumption. This year, for example, the nation is expected to burn up 73.0 quadrillion BTUs—up 4% from last year's levels—with the increase due to (1) a 5.5% increase in real GNP and (2) a return to normal temperatures after last winter, which saw the thermometer averaging 9% warmer than longterm averages.

But despite this aggregate increase in energy use, fuel and power efficiency will continue to increase. Thus, the energy/GNP ratio is slated to fall to 45,100 BTU per 1972 GNP dollar in 1984—a bit under last year's 45,700 reading.

Energy price trends

Percent increase, 4th qtr 1983 to 4th qtr 1984



Source: Department of Energy

PW PREDICTS

Copper

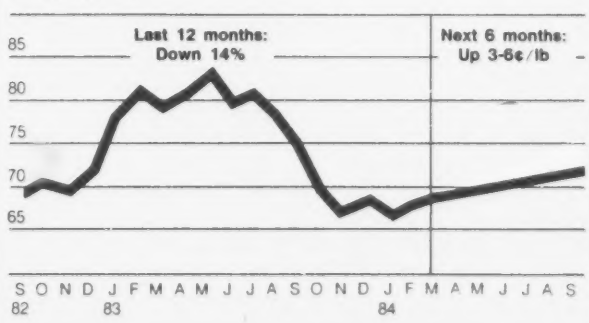
CURRENT SITUATION: Markets remain quite soft. Prices, for example, are still finding it hard to break out into the 70¢/lb-plus range—a level which would still leave most mines awash in a sea of red ink. Blame it on relatively disappointing demand gains—all at a time when there has been continued allout production by currency-hungry Third World countries. The inevitable result: continued topheavy inventories—with global stocks estimated to be the equivalent of a 3-month supply.

DEMAND: The absence of any big spurt in capital spending (a sector which accounts for more than half of U.S. consumption) has hurt. True, investment is beginning to turn around. Even so, **1984 domestic gains will only be in the order of 5%** (to 2.2 million tons of refined metal). **And for the Free World, the increase will be even smaller—only about 2.5%** (to 7.0 million tons).

SUPPLY: The huge inventory overhang (combined LME and Comex stocks now run upwards of 60% higher than a year ago) tells the story. And there's little to suggest any appreciable change. Indeed, Free World production of refined copper in 1984 should continue to top demand—reaching about 7.2 million tons (mostly from overseas sources).

PRICE OUTLOOK: Any nearterm advance will be slow and uneven. To be sure, better non-U.S. demand, increased Chinese requirements, and an improved capital spending outlook will all help. But **it's hard to see quotes reaching the 75¢/lb level by summer or early fall.** And it may well require another year of solid, world recovery to reach the 85¢/lb level which prevailed as recently as last spring. But these latter levels will eventually be needed—if only to make U.S. output viable. **The typical U.S. producer already needs 85-90¢/lb just to break even.**

Copper cathode prices
Cents per pound



Polyvinyl chloride

Quotes are beginning to firm after some late fall and winter weakness, with prices now put in the 33¢/lb range for the general-purpose grade. Nor is that the end of the line; tags are expected to rebound to the mid-1983 list level of 38¢/lb by sometime this summer. Behind this bullish projection: (1) reduced producer inventories and (2) forecasts for anywhere from a 5% to 15% increase in 1984 resin demand (enough to keep operating rates in the 85-90% range.

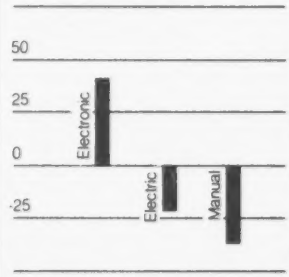
Office space

Shop around for some good rental deals. Reason: The overall office vacancy rate has zoomed to a peak 12.4% (up two full percentage points from a year earlier, and 3-4 times the low rates of 1980 and 1981). Biggest gluts (vacancy rates of 14% or more) are in Atlanta, Dallas, Denver, Houston, Miami, New Orleans, Phoenix, Portland, and San Diego. But don't wait too long. Concessions now being offered won't last forever as new office construction drops more than 30% under yearago levels.

Typewriters

Electronic models will continue to make big inroads. The Computer and Business Equipment Manufacturers Association (CBEMA) is projecting a whopping 38% increase in 1984 shipments of electronic units—up to 360,000 units. Electric types will still command a big share of the market, but the 500,000 or so projected to clear the market will represent a 23% decline from last year's levels. As for manuals—forget them. Only about 10,000 units are expected to be sold this year—a 33% decline from the already-low 13.300 purchased in 1983.

Typewriter demand
(% change 1984/83)



Source: CBEMA

Fasteners

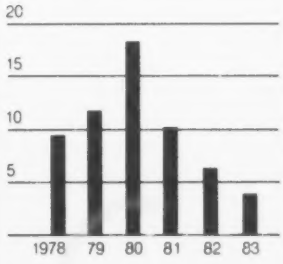
There's still a heck of a lot of discounting going on. Some 46% of the manufacturers and distributors queried recently by *Fastener Industry News* reported price breaks. Percentages off list noted by manufacturers: eyebolts, 20%; B7 stud bolts, 25%; heavy hex nuts, 15%; rivets, 10-40%; hex-head cap screws, 10-30%; spring pins, 30-40%; and special rivets, 40%. Percentages off list noted by distributors: nuts, bolts, and screws, 5-15%; locknuts, 20%; hex-head products, 15%; bolts, 5%; stainless steel fasteners, 10%; and washers, 5%. Both groups see price as one of their

major problems through the first half of 1984.

Machine tools

A large inventory of unsold imported machines (perhaps as many as 12,000 units) continues to overhang the market. Upshot: extensive discounting, with incoming shipments now accounting for 37% and 36% of the metal-cutting and metal-forming sectors, respectively. In any event, price hikes should be quite moderate over the next 3-6 months, with little more than a rise of 3-4% at annual rate anticipated. But demand should gradually improve as the year wears on. Orders for 1984 as a whole are thus expected to be up as much as 40%.

Metal-cutting machine tool prices
(% change from previous year)



Computers

Look for more declines in small, home-type models. In fact, quotes in some cases are already as much as 15-20% under pre-Christmas levels. Factors contributing to the softness include (1) technological advances, (2) increasing competition from Japanese vendors, (3) price infighting among dealers, and (4) IBM's entry into the market with its new PCjr—a step that is likely to force price cuts in competing models.

Aliphatic organics

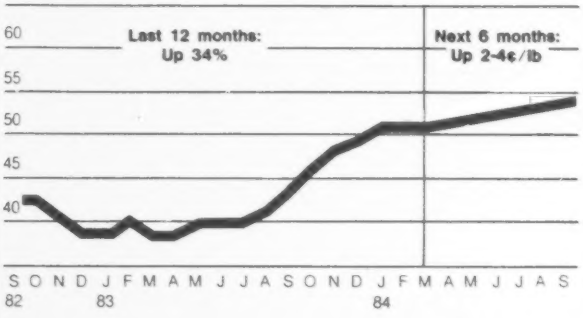
A mixed bag here. Competitive pressures have eroded most of last summer's methanol price boost to 45¢/gal. Indeed, shop around, and you can probably find supplies at only 42¢/gal as export demand continues to sag. On the other hand, good demand from the auto and industrial chemical sectors has allowed about 10¢ of a recent 18¢/gal boost in ethanol to hold, with 190-proof material going for about $1.80/gal. Also up are acrylic esters, where increases range from 1.5¢ to 3¢/lb.

Steel

Gradually improving demand is beginning to firm prices, with the big discounts of last year becoming increasingly hard to find (especially in the sheet sector). Nevertheless, price increases for the most part will be modest, as strong import competition persists. Right now, for example, it looks as if incoming shipments could run in the high 18-19 million-ton range this year. That's substantially above last year's 17-million-ton total. But despite all this import competition, the industry still expects to ship 77-79 million tons for the

Zinc

Cents per pound



CURRENT SITUATION: Market fundamentals remain quite strong. Current signs of basic strength would have to include (1) a recent European producer price boost to $1010/metric ton, (2) declining LME inventories, (3) tightness in SGH metal aggravated by new U.S. mint purchases, and (4) predictions of further consumption gains over the current year. And if there's still any doubt about underlying firmness, take a look at **the prevailing U.S. price, which at latest report was running a resounding 34% above year-earlier levels.**

DEMAND: Another good year now seems all but certain. U.S. usage is expected to rise to 5% (on top of last year's big 16.7% advance)—bringing consumption totals to well over 950,000 tons. Some 50,000 tons of this will be earmarked for the zinc penny. **And sizeable increases of 5% and 7% are projected for the galvanizing and die casting markets, respectively,** as the automotive and home building sectors of the economy continue strong.

SUPPLY: Things have become a bit snug—with SHG problems reported in some Midwest areas. Note, too, that **overall Free World stocks are down to near 300,000 tons—off some 200,000 tons from year-earlier levels. Although we're not approaching a shortage situation, there are problems—namely the decline in U.S. output (off 2.6% last year and 25% from 1981 levels).**

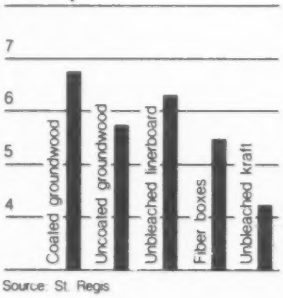
PRICE OUTLOOK: The metal is now in a strong position. Moreover, given the current supply-demand situation, further nearterm advances seem all but inevitable. **Best bet: a price averaging somewhere in the 55¢/lb range by late spring or summer** and then some leveling off as market forces come back into somewhat better balance. Beyond 1984, much depends on the longevity of the current business recovery. Assuming a continuation of the pickup into 1985—plus increasing consumer goods emphasis on galvanized products—a quote of near 58-60¢/lb isn't all that unrealistic for late next winter.

year—up a hefty 15% from 1983 levels.

Paper

Price boosts in both paper and board will continue, with about a 7-9% overall increase anticipated over the 12-month period ending in December. Behind the anticipated uptrend: 95%-plus operating rates and further strong demand gains. Some of the 1984 shipment icnreases anticipated by one major producer: newsprint, 6%; coated groundwood No. 5 paper, 6.8%; uncoated groundwood, 5.8%; unbleached linerboard, 6.3%; fiber boxes, 5.5%; and unbleached kraft paper, 4.2%.

Paper demand
(% increase 1984/83)



Source: St. Regis

Electronic components

The hard-to-get 64K dynamic RAM chip (recently quoted in the $4.50/unit-and-higher range) could drop to under $4 by summer or fall as new capacity comes on stream and demand begins to flatten out. The more powerful 256K chip under development won't be much of a factor this year. But sometime in 1985, the current "sample quantity" $100-plus price could drop to under $30. That's low enough to stimulate a major shift away from the 64K chip.

Aluminum

Markets remain buoyant, with domestic primary producers operating at more than 80% of their potential. New 1984 demand projections are also bullish. U.S. producers are betting on another 7% increase in shipments this year (on top of last year's big 12% gain to 13.2 billion lb). Free World trends are similar; last year's 9% gain in primary output is likely to be followed by another 6.5% gain. But there should be enough to go around with additional metal available from secondary producers. As for prices, ingot could well move up into the 80¢/lb range by late spring or summer.

Lead

Quotes could well edge lower as batterymaker demand drops off seasonally. Labor problems could give the heavy metal a temporary fillip, but by and large, it's hard to make a case for firmness. Other negative factors include (1) low LME quotes, (2) the substantial tonnages of imported metal available at discounts, (3) more-than-ample capacity, and (4) declining use of the metal in gasoline. There could be some fractional consumption gains in 1984, but given still-heavy stocks, it won't be enough to buoy prices until the next battery-buying season.

Floppy disks

Look for more price softness in these computer storage media. The typical 5¼-in. disk, for example, has already dropped by nearly 50% over the past two years (to less than $1.25 each wholesale), and more cuts loom ahead. Quotes are expected to average under $1 each this year as more than 50 firms battle it out—and more entrants in the market are on the way.

Research & development

Chances are your firm will be a bit more involved in research and development this year—with the overall average outlay expected to be up by close to 9%.

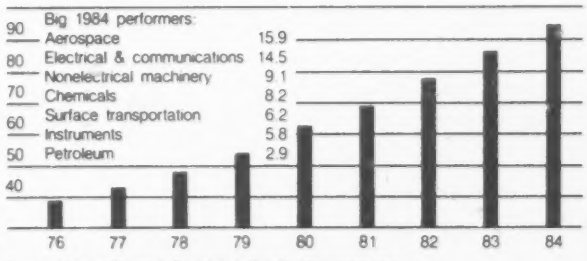
The estimate, based on a new Battelle study, also suggests that the cost of doing R & D will be going up—about 5% overall. Implic ion: Real purchases of R & D-oriented goods and serv will be up some 3.7%—slightly higher than the 3.3% average rate of advance over the past ten years.

Among the industrial sectors, aerospace outfits will be doing the largest volume of work ($15.9 billion)—closely followed by another high-tech sector, electrical and communications ($14.5 billion). These and other big industrial performers of R & D are listed on the accompanying chart.

Another interesting trend: Industrial firms will be funding a larger share of the work—with less attributable to Uncle Sam. On the average, for example, less than 32% of the spending by manufacturers will be funded by the government (well under previous years).

Credit three factors for this increasing willingness for private firms to spend: (1) an improving general economic climate; (2) fewer barriers to cooperative research programs, such as dedicated research centers supported by groups of firms; and (3) recently enacted R & D tax incentives.

Research and development trends
Billions $

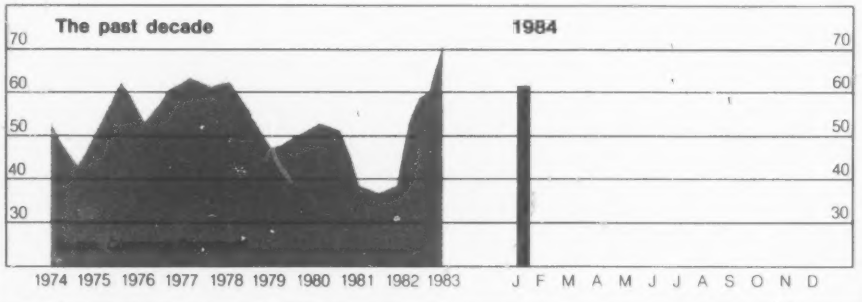


Source: National Research Foundation, Battelle Memorial Institute

BUSINESS DATATRAK

NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance)



KEY ECONOMIC TRENDS

Signs point to sustainable growth

Things still look good. True, the rate of growth seems to be slackening off a bit. But the 4%-or-so annual rate of real GNP advance anticipated for the next two quarters has to be regarded as quite satisfactory, considering the fact that the business upturn is now more than a year old.

The slowing down to more sustainable rates can best be appreciated by looking at the NAPM business barometer—a leading indicator of overall activity a few months down the pike. The latest reading is down a bit from the previous month. But at 61.1 (see chart above), this sensitive yardstick is 11 full index points above the neutral 50 mark.

Add in the still-positive readings from Uncle Sam's own index of leading indicators, and all the talk about the recovery running out of steam seems quite unrealistic.

But perhaps the most positive sign of continuing growth is the confidence being exhibited by hard-headed business executives. Their feelings and expectations—all summarized on the next page—suggest that nobody is even remotely thinking about a dropoff over the next few quarters.

That's not to say, of course, that there aren't problems. Certainly, the huge $180 billion budget deficit projected by the Administration for the next fiscal year is hardly cause for cheer. Neither are continuing high interest rates, which in large part, reflect this huge red-ink projection.

Another worry is the big trade deficit, with imports continuing to eat into domestic vendors' shares. Note from the chart, for example, that the deficit in recent months has been running at a close-to-$60 billion annual rate.

While these deficits (budget and trade) are likely to limit nearterm gains, they are hardly likely to lead to any new declines in overall business activity. One reason: Inventory/sales ratios remain near alltime lows, suggesting that no one on the manufacturing front is buying on speculation.

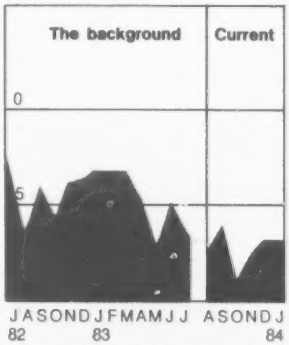
Another sign that all is still going well is the consistently high level of industrial distributor sales recorded in recent months (center chart). It clearly indicates that activity on the grass roots level is still holding up well.

But perhaps the most optimistic sign of all is the continuing influx of new durable goods orders. They have been running at the $95-million-plus level for several months now—better than 15% above year-ago readings (bottom chart). The point to keep in mind here is that today's

Leading indicators

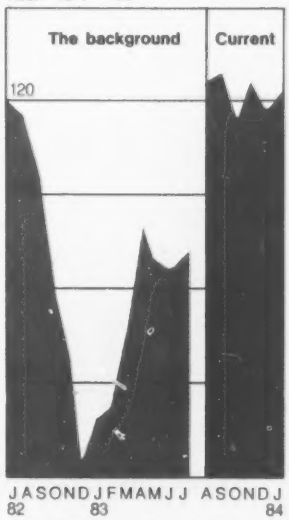
1. Trade deficit

Billions $, seas. adj.



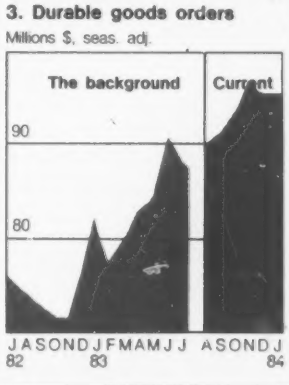
2. Industrial distributor sales

Index: 1977 = 100



3. Durable goods orders

Millions $, seas. adj.



orders are tomorrow's production and the day-after-tomorrow's sales.

And if further evidence is needed to dispel talk of a slowdown, take a look at unemployment rates. At latest report, only about 8% of the workforce was out looking for a job—almost three full percentage points under the 10.7% high hit back in late 1982.

This improving job outlook, if nothing else, should sustain consumer buying. And judging from car sales, it is—with the latest monthly total showing auto purchases at near an 11-million-unit annual rate. That's the highest level in more than four years and well above the 9.2 million units that cleared the market in 1983.

Business leaders remain bullish

The nation's top business leaders are still bullish on America, despite the continuing high deficit and the fact that the recovery is now more than a year old. The evidence on this score is quite impressive:

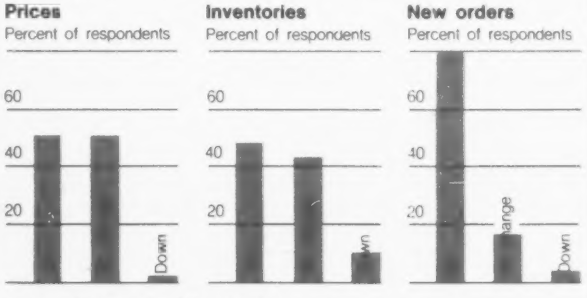
■ A new Conference Board survey of some 1500 chief executives suggests a confidence index of 74 (on a scale of 0-100), virtually matching the peaks of the previous two quarters.

■ A Dun & Bradstreet survey of more than 500 manufacturers on first-quarter 1984 business expectations finds that some four out of every five respondents anticipate that both sales and orders will top year-earlier levels. Just three months ago, the comparable year-to-year figure was less than one out of every two.

As might be expected, the D & B study also points to a rise in inventories, with 47% seeing an uptrend in their overall holdings. But since this is well under the 80% who look for higher orders and sales readings, it suggests a continued tight rein on business stocks.

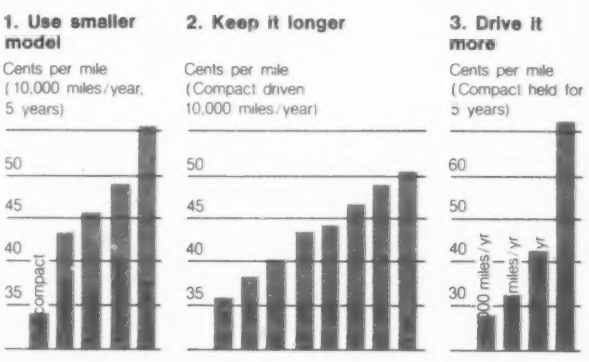
On the other hand, increasing activity will mean some upward price pressure. Nearly one of every two D & B respondents now anticipate that first-quarter prices will top year-earlier levels (versus only 38% when the comparable question was posed three months ago).

First quarter 1984: a vendor view*



* 1st qtr 1984 vs 1st qtr 1983 for all manufacturers
Source: Dun & Bradstreet

Three ways to cut car costs



Source: Hertz

Driving costs vary widely

The kind of car you own and how you drive it can make for a substantial difference in overall vehicle costs.

Just how much a difference is spelled out in a new Hertz study that analyzes cents-per-mile variations by size of auto, how long it's held, and how intensively it's driven:

■ **Size of car:** Assuming a new car is held for five years and is driven 10,000 miles per year, the cost per mile can vary anywhere from 34.6¢ for a subcompact all the way up to 55.4¢ for a standard-size vehicle.

■ **Length of time held:** Assuming a compact driven 10,000 miles per year, the costs can vary from 36.0¢/mile, if held eight years, up to 50.5¢/mile, if traded after only one year.

■ **Mileage driven:** Assuming a compact held for five years, the costs can vary from 28.4¢/mile, if driven 20,000 miles per year, up to 73.9¢/mile, if driven only 5000 miles per year.

Of course, if you opt for a really favorable combination—a small car, held for a long time, and driven intensively—the savings differential can be even bigger. The 28.4¢/mile suggested for a compact held for five years and driven 20,000 miles per year is less than half the 63.3¢/mile indicated for a standard held for two years and driven only 10,000 miles per year.

Another interesting finding of the new report: The average cost of the typical new car fell last year for only the second time in history—dropping 1.4¢/mile, or 3.1%, to 43.3¢/mile.

CURRENT PRICES

Gradual advances expected

Price advances are finally beginning to accelerate a bit.

To be sure, the latest industrial wholesale price in-